

FREQUENCY TRACKING USING PILOT AND NON-PILOT SYMBOLS

ABSTRACT

In one embodiment, the invention is directed toward frequency tracking techniques using control symbols that include both pilot and non-pilot symbols. For example, both the pilot and non-pilot symbols can be used in estimating frequency error of a received signal. The contribution of non-pilot symbols to the estimation can be weighted according to a confidence level associated with each non-pilot symbol. In some cases, soft decisions are generated for the non-pilot symbols and then used with the pilot symbols for frequency tracking. In this manner, the frequency tracking loop can be improved.